

Michigan Office of Administrative Hearings and Rules
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**AGENCY REPORT TO THE
JOINT COMMITTEE ON ADMINISTRATIVE RULES (JCAR)**

1. Agency Information

Agency name:

Licensing and Regulatory Affairs

Division/Bureau/Office:

Public Service Commission

Name of person completing this form:

Lisa Gold

Phone number of person completing this form:

517-420-2291

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goldl@michigan.gov

Name of Department Regulatory Affairs Officer reviewing this form:

Elizabeth Arasim

2. Rule Set Information

MOAHR assigned rule set number:

2020-96 LR

Title of proposed rule set:

Interconnection and Distributed Generation Standards

3. Purpose for the proposed rules and background:

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Section 173 of Public Act 295 of 2008, MCL 460.1173(1) (Act 295), authorized the Commission to promulgate administrative rules governing net metering standards. In 2009, the Commission formally adopted administrative rules governing electric interconnection and net metering. See, Mich Admin Code, R 460.601a-460.656. Those rules focused primarily on small electric generators by dividing them into five categories; the first four categories apply to projects up to 2 megawatts (MWs) and the fifth category applies to projects greater than 2 MWs. In the December 20, 2012 order in Case No. U-15919, the Commission adopted procedures for interconnection of smaller projects (Categories 1 and 2), but has not yet adopted procedures governing the interconnection of larger projects (Categories 3 through 5). Those net metering rules are now outdated and need to be rescinded. A separate RFR has been submitted for that.

There have been significant changes in Michigan's energy landscape driven by rapidly advancing renewable energy technology, including solar, wind, and battery storage. There have also been changes in Michigan's energy laws with the passage of Public Acts 341 and 342 of 2016, which, among other things, amended Act 295. MCL 460.1173(1) now authorizes the Commission to promulgate rules governing distributed generation (DG). See also, MCL 460.1173(6)(b). Likewise, the Institute of Electrical and Electronics Engineers (IEEE) recently updated its technical standards for interconnection, the IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces (IEEE 1547-2018), which has prompted other states to revise their own interconnection rules and standards. Moreover, the Federal Energy Regulatory Commission (FERC) has recently addressed the integration of energy storage facilities in its Order 841 issued on February 15, 2018, which directs regional transmission organizations and independent system operators to establish market rules for energy storage facilities to participate in wholesale energy, capacity, and ancillary services markets. Order 841, 162 FERC ¶ 61, 127; 18 CFR 35.28 (2018).

Finally, in the October 27, 2015 order in Case No. U-17973, the Commission determined that it needed to update the standards applicable to utilities and qualifying facilities (QF) operating pursuant to the Public Utility Regulatory Policies Act of 1978, 16 USC 2601 et seq., 16 USC 824a-3 (PURPA). PURPA was enacted by Congress in 1978 to increase energy conservation and energy efficiency by allowing for renewable resources to interconnect with and sell their generation to utilities. PURPA is largely carried out by the states. 16 USC 2621(b)(2); 16 USC 824a-3(f). For example, the rates paid to QFs are set by the Commission. 16 USC 824a-3; MCL 460.6j(13)(b).

Thus, both PURPA and the new DG law (as well as the legacy net metering law) concern the topic of interconnection with the energy grid. Industry standards for interconnection have been updated since the 2009. The Commission's current rules are outdated and need to be replaced. The Commission expects that the new rules will decrease the time required to interconnect a distributed energy project into the electric distribution system. Larger generators tend to be interconnecting with the utility under PURPA requirements. In this rulemaking, the Commission will promulgate new rules addressing interconnection requirements for generators of all sizes, DG standards, and legacy net metering, to address the concerns described herein. Simultaneously, the Commission is rescinding the 2009 interconnection and net metering rules.

This proposed ruleset was previously included in 2019-087, which was voided on March 10, 2020.

4. Summary of proposed rules:

The Interconnection and Distributed Generation Standards are rules that detail how projects owned by customers, developers, and in some situations, the utility, connect to the utility distribution system. These rules provide a standardized process and schedule so that interconnections can be accommodated in an orderly and timely manner. The rules also ensure that interconnections are done reliably and safely, in order to protect workers, utility and third-party owned equipment, and the public. The Interconnection and Distributed Generation Standards are an update to the Electric Interconnection and Net Metering Standards necessitated by advances in distributed energy resource technology and an increase in distributed generation penetration on the distribution systems in Michigan. The Interconnection and Distributed Generation Standards are promulgated pursuant to the same authority as, and replace, the Electric Interconnection and Net Metering Standards, which will be rescinded concurrently with the approval of these rules.

5. List names of newspapers in which the notice of public hearing was published and publication dates:

Two public hearings were held in this matter.
The Oakland Press October 6, 2021
The Mining Journal October 6, 2021
The Grand Rapids Press October 6, 2021
The Oakland Press June 11, 2022
The Mining Journal June 11, 2022
The Grand Rapids Press June 12, 2022

6. Date of publication of rules and notice of public hearing in Michigan Register:

6/15/2022

7. Date, time, and location of public hearing:

6/22/2022 09:00 AM at Lake Michigan Hearing Room , 7109 W. Saginaw Hwy., Lansing MI 48917

8. Provide the link the agency used to post the regulatory impact statement and cost-benefit analysis on its website:

<https://ARS.apps.lara.state.mi.us/Transaction/RFRTransaction?TransactionID=1222>

9. List of the name and title of agency representative(s) who attended the public hearing:

Benjamin Holwerda, Assistant Attorney General, on behalf of Michigan Public Service Commission (MPSC or Commission) Staff, and Julie Baldwin, Division Director at the MPSC, on October 20, 2021.

Monica Stephens, Assistant Attorney General, on behalf of the MPSC Staff, and Julie Baldwin, Division Director at the MPSC, on June 22, 2022.

10. Persons submitting comments of support:

No one testified at the first public hearing. All written comments suggested revisions.

Matthew Paul testified at the second public hearing on behalf of DTE Energy and suggested revisions. All written comments suggested revisions.

11. Persons submitting comments of opposition:

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No one testified at the first public hearing. All written comments suggested revisions.

Matthew Paul testified at the second public hearing on behalf of DTE Energy and suggested revisions. All written comments suggested revisions.

12. Persons submitting other comments:

All written comments suggested revisions. Written comments were submitted by Adam Schaller, Marco Menzes, Michigan Energy Innovation Business Council (MEIBC), Association of Businesses Advocating Tariff Equity (ABATE), Michigan Electric and Gas Association (MEGA), DTE Electric Company (DTE Electric), Michigan Biomass, Consumers Energy Company (Consumers), Ford Motor Company (FMC), Coalition of Community Solar Access (CCSA), Sunrun, Inc., IBEW Local 17, Michigan Electric Cooperative Association, and Vote Solar, the Ecology Center, and the Environmental Law and Policy Center (together the Clean Energy Organizations or CEOs). Some commenters submitted redlined versions of the rules with their comments, but most did not.

13. Identify any changes made to the proposed rules based on comments received during the public comment period:

	Name & Organization	Comments made at public hearing	Written Comments	Agency Rationale for Rule Change and Description of Change(s) Made	Rule number & citation changed
1	ABATE		Clarify whether the cost allocation info in Rule 970 applies to both installation and operations and maintenance (O&M) costs.	PSC agrees that rule should show that O&M costs are also considered in cost allocation.	460.970
2	CCSA		Concerned with only having one batch per year Only put applications that fail an electrical independence test in batch Levels should be larger.	PSC agrees that the batch process is unnecessary and removed it.	460.956, 460.954

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3	Consumers		<p>Concerns w/rule 964 which limits the interconnection costs to 110% of the estimate. They also point out the rule does not have a timeline for the applicant to respond.</p> <p>Rule 988 should be changed to make the utility responsible for providing easements or right of way</p> <p>Recommends that the interconnection submittal and review process be incorporated into the material modification request</p> <p>Proposes that DG program review happen after the interconnection application review instead of in parallel.</p> <p>Clarify “days’ vs “business days” throughout ruleset.</p>	<p>PSC agrees that days should be clarified as calendar days. PSC agrees that actual interconnection (IX) costs and timeline should be clarified. PSC agrees that procurement of the right-of-way by the applicant should be made clear. PSC agrees that distributed generation (DG) program and IX program applications should be reviewed in sequential order, not in parallel.</p>	<p>460.920, 460.1001, 460.990, 460.964, 460.988, 460.1006.</p>
4	DTE Electric		<p>Rules will result in confusion, errors,</p>	<p>PSC agrees that utility holidays should be</p>	<p>460.901a, 460.920, 460.991,</p>

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		<p>misunderstanding s, and disagreement and impose unnecessarily complex and prescriptive processes</p> <p>Fee caps could result in a taking</p> <p>Utility holidays should be excluded from the business day. Definitions should be updated to reflect latest version of UL 1741. Concerns about retroactive application should be addressed. The preapplication form should ascertain whether the distributed energy resource (DER) is certified. The site owner's contact information should be included. Some of the proposed tracks are unnecessary. 10 business days should be changed to 20 business days. Applicant should proceed only</p>	<p>excluded from the business day. PSC agrees that definitions should be updated to reflect latest version of UL 1741. PSC agrees that concerns about retroactive application should be addressed. PSC agrees to modify the fees. PSC agrees that the preapplication form should ascertain whether the distributed energy resource (DER) is certified. PSC agrees that the site owner's contact information is important. PSC agrees that some of the proposed tracks are unnecessary and deletes them. PSC agrees that 10 business days should be changed to 20 business days and agrees to other clarifications. PSC agrees that applicant should proceed only pursuant to an executed IX agreement. PSC agrees that legacy net metering</p>	<p>460.902, 460.911, 460.928, 460.930, 460.934, 460.944, 460.946, 460.942, 460.964, 460.966, 460.984, 460.1001, 460.1004, 460.1020, 460.914, 460.916, 460.918.</p>
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			<p>pursuant to an executed IX agreement. Legacy net metering customers have only a certain time period. Some rules should be deleted because they appear to have retroactive application which is unlawful.</p>	<p>customers have a certain time period.</p>	
5	FMC		<p>Develop a fast track process for EVs seeking Level 1 or 2. Use simplified process if additional study is needed.</p>	<p>PSC agrees that level 1 and 2 should be processed through the fast track.</p>	<p>460.940, 460.944</p>

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6	MEGA		<p>Due to smaller staffs, want 30 instead of 10 days to for applications and inspections or in the alternative, provide flexibility in rules</p> <p>Some members use a progressive 3-level review/study process instead of what is proposed in the rules</p> <p>Timelines are very aggressive for smaller utilities</p> <p>Also includes a list of concerns with many rules, including rule on experts is unnecessary, rules should not be retroactive, fees should be modified, batch process is unnecessary, modification definition is unclear, insurance reqts are overstated.</p>	<p>PSC agrees to delete the rule on experts. PSC agrees to address potential retroactive application of the rules. PSC agrees to fee changes. PSC agrees to remove the batch process. PSC agrees to clarify modifications. PSC agrees to increase the inspection time for certain projects. PSC agrees to modify insurance requirements for certain levels. PSC agrees to create a longer timeline for the smaller utilities.</p>	<p>460.908, 460.911, 460.926, 460.928, 460.956, 460.901b, 460.964, 460.966, 460.920, 460.986, 460.908, 460.918, 460.952, 460.960.</p>

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7	Sunrun		<p>Need rules to address energy storage systems (ESS).</p> <p>Incorporate use of certified power control systems to limit export</p> <p>Incorporate inverter power control functions to enable customer savings on interconnection costs</p> <p>UL 1741 Edition 3 was released on 9/28/2021</p> <p>UL 1741 SA inverters can be set with a constant lagging power factor to limit voltage rise and upgrades</p> <p>Consider adding definitions to address ESS.</p>	<p>PSC agrees to add rules addressing ESS, including several new definitions, because ESS has become essential. PSC agrees to update certain definitions to reflect the latest version of referenced materials. PSC agrees that utility shall consider 100% of applicable loading and only the proposed DER export capacity.</p>	<p>460.901a, 460.901b, 460.980, 460.946, 460.1001.</p>

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8	MEIBC second round		<p>Informal mediation should include a 10 day timeline. A party should not be required to participate in informal mediation in order to begin formal mediation.</p> <p>It should be clear that DG applicants don't need to pay more than \$50 total.</p> <p>It should be made clear why the public interconnection list has not been updated.</p>	<p>PSC finds that all of these suggestions are reasonable because they will improve the rules and agrees to all of the following:</p> <p>Informal mediation should include a 10 day timeline. A party should not be required to participate in informal mediation in order to begin formal mediation.</p> <p>It should be clear that DG applicants don't need to pay more than \$50 total.</p> <p>It should be made clear why the public interconnection list has not been updated.</p>	<p>460.904, 460.926, 460.938, 460.906.</p>

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9	Consumers second round		<p>Certain unnecessary language should be deleted from the non-export track review and the rule should include a description of what happens when an application needs further study.</p> <p>Additional review screens should be allowed.</p>	<p>PSC agrees that the noted language is unnecessary and deletes it and agrees that the rule should include a description of what happens when an application needs further study.</p> <p>The PSC agrees that additional review screens should be allowed to give the utilities more flexibility.</p>	460.942, 460.950
10	MEIBC		<p>Rules must spell out how storage will be treated and evaluated during the interconnection screening and study process.</p> <p>Power-limited export should be available and pointed out that FERC Order 845 addresses this issue.</p> <p>No required re-application for legacy NM/DG program customers to add storage.</p> <p>Speed up batch processing time.</p> <p>Clarify definition</p>	<p>PSC agrees that material modification should be clarified. PSC agrees to clarify the path forward for DG customers. PSC agrees that the ability to participate in the IX procedure proceedings should be clarified. PSC agrees that the fee caps should be clarified. PSC agrees that the preapplication processing time should be reduced. PSC agrees that the IX list should be made public and agrees to other clarifications. PSC agrees that certain</p>	460.901b, 460.982, 460.911, 460.920, 460.926, 460.928, 460.932, 460.936, 460.938, 460.946, 460.950, 460.954, 460.956, 460.958, 460.964, 460.980, 460.988, 460.1001, 460.1008, 460.918, 460.952, 460.960

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			<p>of material modification</p> <p>Don't limit the ability of the applicant to reduce the capacity of the DER to only 20%</p> <p>Concerns about stakeholder engagement and commission approval for interconnection procedures phase</p> <p>Concerns about fee amounts and waivers from fee caps</p> <p>Would like to shorten time period for pre-app report from 25 business days to 15 business days</p> <p>Clarify easements and right of way rule</p> <p>DG program requirement that an energy storage device does not export to the grid should be removed.</p> <p>Ambiguous terms should be deleted from Rule 982 regarding</p>	<p>additional screens should not be allowed. PSC agrees to the removal of certain tracks and the batch process. PSC agrees that the rules should address energy storage systems (ESS). PSC agrees that ambiguous terms should be deleted. Same right of way issue as above.</p>	
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			modification of IX applications.		
11	DTE second round		Utility should not have to apply to interconnect a substation energy storage backup device. The definitions of 'aggregate capacity', 'generating capacity', and 'ongoing operating capacity' are not needed. The definition of 'certified' should be updated. The definition of 'commissioning test' should be clarified. The definition of 'inadvertent export' should be updated. The definition of 'interconnection agreement' needs timelines as estimates and needs controls, settings and amendments. The definition of 'material modification' should be clarified. The following comments all refer to definitions: 'Nameplate	PSC finds that all of these suggested revisions are reasonable because they will improve the rules and agrees to all of the following: Utility should not have to apply to interconnect a substation energy storage backup device. The definitions of 'aggregate capacity', 'generating capacity', and 'ongoing operating capacity' are not needed. The definition of 'certified' should be updated. The definition of 'commissioning test' should be clarified. The definition of 'inadvertent export' should be updated. The definition of 'interconnection agreement' needs timelines as estimates and needs controls, settings and amendments. The definition of 'material	460.901a, 460.901b, 460.920, 460.930, 460.942, 460.944, 460.946, 460.950, 460.960, 460.962, 460.964, 460.966, 460.968, 460.980, 460.988 460.1026

		<p>capacity’ is not needed and ‘nameplate rating should be updated. ‘Power control system’ should be updated. ‘Reasonable efforts’ is not needed.</p> <p>The number of days for filing interconnection procedures should be extended.</p> <p>Projects that want to interconnect with the 4.8kV system should understand the technical limitations.</p> <p>Direct current kW and information about the inverter system design should be added to the pre-application report form.</p> <p>It should be clear that DERs that will not inject energy can be evaluated under the non-export track. It should be clear that utilities need only provide reasonable</p>	<p>modification’ should be clarified. The following comments all refer to definitions: ‘Nameplate capacity’ is not needed and ‘nameplate rating should be updated. ‘Power control system’ should be updated. ‘Reasonable efforts’ is not needed.</p> <p>The number of days for filing interconnection procedures should be extended. Projects that want to interconnect with the 4.8kV system should understand the technical limitations.</p> <p>Direct current kW and information about the inverter system design should be added to the pre-application report form.</p> <p>It should be clear that DERs that will not inject energy can be evaluated under the non-export track. It should be</p>	<p>modification’ should be clarified. The following comments all refer to definitions: ‘Nameplate capacity’ is not needed and ‘nameplate rating should be updated. ‘Power control system’ should be updated. ‘Reasonable efforts’ is not needed.</p> <p>The number of days for filing interconnection procedures should be extended. Projects that want to interconnect with the 4.8kV system should understand the technical limitations.</p> <p>Direct current kW and information about the inverter system design should be added to the pre-application report form.</p> <p>It should be clear that DERs that will not inject energy can be evaluated under the non-export track. It should be</p>
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		<p>assistance.</p> <p>The fast track where interconnecting to the 4.8kV system should be limited to 1 MWac. The energy storage device criteria for fast track should be modified.</p> <p>Utilities should be allowed to add additional screens. Applicable loading should be dealt with in more detail.</p> <p>Applicants should be required to provide reasonably requested data.</p> <p>The utility should be able to put the impact study on hold.</p> <p>The facilities study agreement should be provided within 10 days.</p> <p>Paper mail should be allowed for the IX agreement.</p> <p>Construction milestones and costs should be</p>	<p>clear that utilities need only provide reasonable assistance.</p> <p>The fast track where interconnecting to the 4.8kV system should be limited to 1 MWac. The energy storage device criteria for fast track should be modified.</p> <p>Utilities should be allowed to add additional screens. Applicable loading should be dealt with in more detail.</p> <p>Applicants should be required to provide reasonably requested data.</p> <p>The utility should be able to put the impact study on hold.</p> <p>The facilities study agreement should be provided within 10 days.</p> <p>Paper mail should be allowed for the IX agreement.</p> <p>Construction milestones and</p>	
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		<p>allowed to be estimated. The time for providing a level 4 and 5 IX agreement to the applicant should be extended and timelines should be estimated. Language addressing rights and obligations is not necessary.</p> <p>The timeframe for inspection and testing should be mutually agreed and certain activities should be contingent upon resolution of preceding steps.</p> <p>Prior to parallel operation the applicant should execute the IX agreement.</p> <p>Utilities should be allowed to propose alternatives to the inadvertent export provisions of the DERs rule in their IX procedures.</p> <p>The utilities should not be required to acquire</p>	<p>costs should be allowed to be estimated. The time for providing a level 4 and 5 IX agreement to the applicant should be extended and timelines should be estimated. Language addressing rights and obligations is not necessary.</p> <p>The timeframe for inspection and testing should be mutually agreed and certain activities should be contingent upon resolution of preceding steps.</p> <p>Prior to parallel operation the applicant should execute the IX agreement.</p> <p>Utilities should be allowed to propose alternatives to the inadvertent export provisions of the DERs rule in their IX procedures.</p> <p>The utilities should not be required to acquire easements at the request of a private entity.</p>	
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			easements at the request of a private entity. Timeframe in Rule 920 should be 120 days. "Standard" should be deleted from level 1-3 IX agreements.	
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14.Date report completed:

1/12/2023